

In the Claims:

Please amend the claims of the above-identified application as follows:

1. (Currently Amended) A disk cartridge, comprising:

a first cartridge containing a first disk recording medium, ~~the~~ having a first cartridge
including diameter,

the said first cartridge having including plural holes, which have different radial
positions with respect to a disk center respectively, the plural holes being at least
one hole for recognizing indicative of a relationship between said first diameter
and a predetermined diameter of a relation in size between a disk diameter of a
second disk cartridge which contains a second disk recording medium having
contained in a second disk cartridge that is different from said first disk diameter
of said first and a disk recording medium contained in said diameter of the first
cartridge.

2. (Currently Amended) The disk cartridge according to claim 1, wherein ~~the hole is~~
~~provided so as to indicate the said~~ holes are indicative of said disk recording medium
diameter of each of said first and second disk recording mediums or an outer-most
outermost operational movement of a pickup of a disk recording and reproducing
apparatus for receiving said first cartridge or said second cartridge and reading data from
or recording data to said first disk recording medium or said second disk recording
medium peripheral position during movement of a pickup.

3. (Currently Amended) The disk cartridge according to claim 2, wherein a hole is provided in said second cartridge, and the a hole of in said each first cartridge is provided at a same coordinate position or a same radial position as said hole in said second cartridge with respect to a disk center location in a said disk recording and reproducing apparatus, regardless of the respective diameters of each said first and second disk recording mediums in said first and second cartridges.
4. (Currently Amended) The disk cartridge according to claim 2, comprising:
a first cartridge containing a first disk recording medium having a first diameter, said first-cartridge including:
at least one hole indicative of a relationship between said first diameter and a predetermined diameter of a second disk recording medium contained in a second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first cartridge,
wherein said at least one hole is provided so as to indicate the disk diameter of said each disk recording medium or an outermost peripheral position during movement of a pickup, and
wherein a length of the said at least one hole is formed to indicate indicative of
(a) a disk diameter from a disk recording medium for a minimum disk diameter to the of said first disk recording medium of the contained in said first cartridge or (b) said the outer most peripheral outermost operational position during the movement of said pickup.

5. (Currently Amended) A disk recording and reproducing apparatus, comprising:
- a. a pickup for recording and/or reproducing information to/from of a disk cartridge disposed therein,
said disk cartridge including:
 - a first cartridge containing a first disk recording medium having
a first diameter, and the first cartridge including: at least one hole
for recognizing a plurality of holes, which have different radial
positions with respect to a disk center respectively, the plurality
of holes being indicative of a relationship in size between said
first diameter and a predetermined disk diameter of a second disk
recording medium contained in a second disk cartridge that is
which contains a second disk recording medium having a
different from said first disk diameter of said first disk recording
medium contained in said first cartridge and a disk diameter of
the first cartridge; and
 - b. a restricting member for restricting a movement of the said pickup in an outer
peripheral outward radial direction which is relative to a disk recording
medium positioned in said recording and reproducing apparatus to not
less than a predetermined radius,
wherein the said restricting member detects said disk diameter of the disk
recording medium positioned in said recording and reproducing
apparatus through the one of said plurality of holes and restricts radial
movement of the said pickup to in the outer peripheral direction, which is
not less than the said predetermined of radius.

6. (Currently Amended) The disk recording and reproducing apparatus according to

claim 5, further comprising a chassis which includes the said restricting member, the said restricting member being made up of a plurality of restricting pins, each of which is said restricting pins being provided so as to project either toward the a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing (a) at a position corresponding to the hole of each said cartridge and (b) at a position which indicates indicative of (i) a the disk diameter of the a disk recording medium for having a maximum disk diameter or (ii) an outermost operational position of said the outer most peripheral position during movement of the pickup,

wherein when the a second disk cartridge containing the a disk recording medium having the a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said recording and reproducing apparatus, at least one of said each restricting pins of the chassis contacts with a lower surface of the cartridge of the said loaded disk cartridge and is pushed toward the said pickup housing from the said chassis so as to restrict the outer most peripheral outermost operational position of the said pickup, whereas the at least one of said restricting pins provided inside of the located radially inwardly relative to said restricting pins to be pushed toward the said pickup housing ge extend into the a hole of in said each second cartridge so as to avoid projecting toward the said pickup housing from the said chassis.

7. (Currently Amended) The disk recording and reproducing apparatus according to claim 6,
wherein each of ~~the~~ said restricting pins is pushed out by an elastic material so as to tend to project toward ~~the~~ a cartridge ~~of loaded~~ into said the chassis.
8. (Currently Amended) The disk recording and reproducing apparatus according to claim 6, wherein ~~the~~ a restricting pin, ~~which is~~ provided at ~~the~~ a position ~~which indicates~~ indicating the disk diameter of the disk recording medium ~~for the~~ having a maximum disk diameter or the ~~outer most peripheral~~ outermost operational position ~~during the movement of the~~ said pickup, is fixed so as to project toward ~~the~~ said pickup housing of ~~the~~ said chassis.
9. (Currently Amended) The disk recording and reproducing apparatus according to claim 7, wherein ~~the~~ a restricting pin, ~~which is~~ provided at ~~the~~ a position ~~which indicates~~ indicating the disk diameter of the disk recording medium ~~for the~~ having a maximum disk diameter or the ~~outer most peripheral~~ outermost operational position ~~during the movement of the~~ said pickup, is fixed so as to project toward ~~the~~ said pickup housing of ~~the~~ said chassis.

10. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge having a plurality of holes, which have different radial positions with respect to a disk center respectively, the plurality of holes being including: a hole being provided so as to indicate indicative of a a relationship between said first disk diameter of each a disk recording medium contained therein or outer-most peripheral an outermost operational position during movement of a pickup, and
- b. a restricting member for restricting a movement of the said pickup in an outer peripheral outward operational direction; to a distance which is not less than a predetermined radius,

wherein the said restricting member detects a disk diameter through the one of said plurality of holes and restricts movement of the said pickup in the outer peripheral direction; said outward operational direction to a distance which is not less than the said predetermined radius.

11. (Currently Amended) The disk recording and reproducing apparatus according to

claim 10, comprising a chassis ~~which includes~~ including a restricting member,
the said restricting member being made up comprising of a plurality of restriction pins, wherein each of which is provided so as to project those of said restriction pins located at a position corresponding to a hole in said loaded cartridge project toward the said cartridge or and those of said restriction pins located at a position indicating a maximum disk diameter of said-disk recording medium or the outermost operational position of said pickup project toward a pickup housing

~~(a) at a position corresponding to the hole of said each cartridge and (b) at a position which indicates the disk diameter of the disk recording medium for a maximum disk diameter or the outer most peripheral position during movement of the pickup, and~~
wherein when the a disk cartridge containing the a disk recording medium having the a second diameter different from said first diameter has been is loaded into said recording and reproducing apparatus, at least one of said each restricting pins of the chassis contacts with the lower surface of the cartridge of the loaded disk cartridge and is pushed toward the pickup housing from the said chassis so as to restrict to outer most peripheral the outermost operational position of the said pickup, whereas at least one other of said restricting pins provided inside located radially inwardly of the said at least one restricting pins to be pushed toward the pickup housing go extends into the a hole of each in said loaded cartridge containing said-second diameter disk recording medium so as to avoid projecting toward the said pickup housing from the said chassis.

12. (Currently Amended) The disk recording and reproducing apparatus according to claim 11, wherein each of the said restricting pins is pushed out by an elastic material so as to tend to project toward the a cartridge of the loaded into said chassis.

13. (Currently Amended) The disk recording and reproducing apparatus according to claim 11, wherein ~~the~~ a restricting pin, ~~which~~ is provided at the position which indicates the maximum disk diameter of ~~the~~ a disk recording medium ~~for the maximum disk diameter or at the outer most peripheral position during movement of the~~ outermost operational position of said pickup, and that restricting pin is fixed so as to project toward ~~the~~ said pickup housing of ~~the~~ said chassis.

14. (Currently Amended) The disk recording and reproducing apparatus according to claim 12, wherein ~~the~~ a restricting pin, ~~which~~ is provided at the position which indicates the maximum disk diameter of a disk recording medium ~~for the maximum disk diameter or at the outer most peripheral position during movement of the~~ outermost operational position of said pickup, and that restricting pin is fixed so as to project toward ~~the~~ said pickup housing of ~~the~~ said chassis.

15. (Currently Amended) A disk recording and reproducing apparatus, comprising:

a. a pickup for recording and reproducing of a disk cartridge;

said disk cartridge including: a first cartridge containing a first disk

recording medium having a first diameter, and the first cartridge
including:

at least one hole for recognizing a relation in size a
plurality of holes, which have different radial positions
with respect to a disk center respectively, the plurality of
holes being indicative of a relationship between a second
disk diameter of a second disk recording medium
contained in a second disk cartridge which contains a
second disk recording medium having a different and
said first disk diameter, said second disk diameter and a
being different from said first disk diameter of the first
cartridge the said plurality of holes being provided so as
to indicate the disk diameter of said each disk recording
medium or an outer most peripheral position during
movement of the operational position of said pickup,
the said plurality of holes of said each cartridge being

provided at the same coordinate positions or at the same
radial positions with respect to a disk center in a of said
disk recording and reproducing apparatus, regardless of
the respective diameters of said each disk recording
mediums, and

- b. a restricting member for restricting a movement of the said pickup in an outer peripheral outward operational direction, ~~which is to~~ not less than a predetermined of radius, wherein the said restricting member detects a disk diameter through the one of said plurality of holes and restricts the said movement of the said pickup in the ~~outer peripheral~~ said outward operational direction, ~~which is to~~ not less than the said predetermined of radius.

16. (Currently Amended) The disk recording and reproducing apparatus according to claim 15, further comprising a chassis which includes the restricting member, the restricting member being made up of a plurality of radially disposed restricting pins, ~~each of which is said restricting pins~~ being provided so as to project either toward the a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing (a) ~~at a position corresponding to the hole of each said cartridge~~ and (b) at a position ~~which indicates~~ indicative of (i) a the disk diameter of the a disk recording medium for having a maximum disk diameter or (ii) an outermost operational position of said ~~the outer most peripheral position during movement of the pickup,~~

wherein when the a second disk cartridge containing the a disk recording medium having the a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said recording and reproducing apparatus, at least one of said each restricting pins of the chassis contacts with a lower surface of the cartridge of the said loaded disk cartridge and is pushed toward the said pickup housing from the said chassis so as to restrict the outer-most-peripheral outermost operational position of the said pickup, whereas the at least one of said restricting pins provided inside of the located radially inwardly relative to said restricting pins to be pushed toward the said pickup housing go extend into the a hole of in said each second cartridge so as to avoid projecting toward the said pickup housing from the said chassis.

17. (Currently Amended) The disk recording and reproducing apparatus according to claim 16, wherein each of the said restricting pins is pushed out by an elastic material so as to tend to project toward the said cartridge of the said chassis.

18. (Currently Amended) The disk recording and reproducing apparatus according to claim 16, wherein the a one of said restricting pins, which is provided at the said position which indicates the indicating a maximum one of said disk diameters of the said disk recording mediums for the maximum disk diameter or the said outer most peripheral operational position during movement of the said pickup, is fixed so as to project toward the said pickup housing of the said chassis.

19. (Currently Amended) The disk recording and reproducing according to claim 17,
wherein the one of said restricting pins, ~~which is provided at the said position~~
~~which indicates the~~ indicating a maximum one of said disk diameters of the said
disk recording mediums ~~for the maximum disk diameter or the said outer most~~
peripheral operational position ~~during movement of the said pickup~~, is fixed so as
to project toward the said pickup housing of the said chassis.
20. (Currently Amended) A disk recording and reproducing apparatus, comprising:
- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge including: a first cartridge containing a first disk recording
medium having a first diameter, ~~the first cartridge including:~~
at least one hole for recognizing a relation in size between a disk second diameter
of a ~~second disk cartridge which contains a second disk recording medium~~
~~having a~~ contained in a second disk cartridge, said second disk diameter being
different from disk diameter and a said first disk diameter of the first cartridge,
the said hole being provide so as to indicate the said disk diameters of each of
said disk recording mediums or an outer most peripheral operational position
~~during movement of said a pickup, the hole, a length of the said hole being~~
~~formed to indicate indicative of (a) a difference in disk diameter from between a~~
minimum diameter disk recording medium for a minimum disk diameter to the
and (a) said first diameter of said first disk recording medium of the first
cartridge or (b) the outer most peripheral operational position during movement
of the said pickup, and
 - b. a restricting member for restricting a movement of the said pickup in an
outer peripheral outward radial direction, ~~which is to~~ not less than a
predetermined of radius, wherein the said restricting member detects said
minimum disk diameter through the said hole and restricts the movement of the
said pickup in the said outer peripheral radial direction, ~~which is to~~ not less than
the said predetermined of radius.

21. (Currently Amended) The disk recording and reproducing apparatus according to claim 20, further comprising a chassis which includes the restricting member, the restricting member being made up of a plurality of radially disposed restricting pins, each of which is said restricting pins being provided so as to project either toward the a cartridge loaded into said disk recording and reproducing apparatus or toward a pickup housing (a) at a position corresponding to the hole of each said cartridge and (b) at a position which indicates indicative of (i) a the disk diameter of the a disk recording medium for having a maximum disk diameter or (ii) an outermost operational position of said the outer most peripheral position during movement of the pickup, wherein when the a second disk cartridge containing the a disk recording medium having the a different diameter from that of said disk recording medium contained in said first cartridge has been loaded into said recording and reproducing apparatus, at least one of said each restricting pins of the chassis contacts with a lower surface of the cartridge of the said second loaded disk cartridge and is pushed toward the said pickup housing from the said chassis so as to restrict the outer most peripheral outermost operational position of the pickup, whereas the at least one of said restricting pins provided inside of the located radially inwardly relative to said restricting pins to be pushed toward the said pickup housing go extend into the a hole of in said each second cartridge so as to avoid projecting toward the said pickup housing from the said chassis.

22. (Currently Amended) The disk recording and reproducing apparatus according to claim 21, wherein each of the said restricting pins is pushed out by an elastic material so as to tend to project toward the said cartridge of the in said chassis.

23. (Currently Amended) The disk recording and reproducing apparatus according to claim 21, wherein the one of said restricting pins, which is provided at the said position which indicates the indicative of said maximum disk diameter of the said disk recording mediums for the maximum disk diameter or the said outer most peripheral operational position during movement of the said pickup, is fixed so as to project toward the said pickup housing of the said chassis.
24. (Currently Amended) The disk recording and reproducing apparatus according to claim 22, wherein the one of said restricting pins, which is provided at the said position which indicates the indicative of said maximum disk diameter of the said disk recording mediums for the maximum disk diameter or the said outer most peripheral operational position during movement of the said pickup, is fixed so as to project toward the said pickup housing of the said chassis.
25. (Currently Amended) A disk recording and reproducing apparatus, comprising:
- (a) a pickup for recording and reproducing of a disk cartridge;
said disk cartridge including: a first cartridge containing a first disk recording medium having a first diameter, the first cartridge including:
at least one hole for recognizing a relation in size between a a second disk recording medium having a second diameter of a second disk cartridge which contains contained in a second disk recording medium and said first diameter, said second diameter being different from said first diameter having a different disk diameter and a disk diameter of the

~~first cartridge, the said hole being provide so as to indicate the~~
indicative of said disk diameters of each said disk recording mediums or
an outer most peripheral operational position during movement of a
pickup, the hole, a length of the said hole being formed to indicate
indicative of (a) a difference in disk diameter from between a disk
recording medium for having a minimum disk diameter to the and said
first diameter of said first disk recording medium of the first cartridge or
(b) the outer most peripheral operational position during movement of
the said pickup,

said apparatus having a structure in which length of ~~the~~ said hole is detected
so as to mechanically define a movable outer peripheral operational
position of ~~the~~ said pickup.

26. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- a. a pickup for recording and reproducing of a disk cartridge;
said disk cartridge including: a first cartridge containing a first disk
recording medium having a first diameter, and the first cartridge
~~including:~~ at least one hole for recognizing a relation in size
between a disk diameter of a second disk recording medium
contained in a second cartridge which contains a second disk
recording medium having a different from said first disk diameter
~~and a disk diameter of the first cartridge, the said hole being provide~~
~~so as to indicate the~~ indicative of said disk diameters of each said
disk recording mediums or an outer most peripheral operational

position ~~during movement~~ of a pickup, ~~the hole,~~ a length of the said hole being ~~formed to indicate~~ indicative of (a) a difference between a disk diameter ~~from of a minimum~~ disk recording medium ~~for a minimum disk diameter to the~~ and said first diameter of said first disk recording medium of the first cartridge or (b) the outer most ~~peripheral operational~~ position ~~during movement~~ of the said pickup, and

b. a chassis,

said chassis including a single restriction pin provided so as to be movable radially and to contact ~~with the~~ said pickup, ~~which is~~ said restriction pin being inserted into the said hole of each of ~~the said~~ cartridges ~~in~~ during its loading into said apparatus.

27. (Currently Amended) A disk recording and reproducing apparatus, comprising:

a. a pickup for ~~carrying out~~ recording and reproducing with respect to disk

cartridges, ~~each of which~~ wherein each said disk cartridge contains a disk recording medium having respective and different disk cartridges contain disk recording media having different diameters relative to each other, said disk cartridges each having a plurality of holes therein which have different radial positions with respect to a disk center respectively, the plurality of holes being indicative of a relationship between a disk recording media diameter of one cartridge and a predetermined diameter of another cartridge that is different from the diameter of the disk recording medium contained in the one cartridge, and

b. a chassis, including:

a restricting member which ~~presses a side wall of the~~ engages and exerts pressure against a cartridge loaded into said disk recording and reproducing apparatus and is disposed in contact with said ~~contacts with the pickup when the a disk cartridge is loaded into said recording and reproducing apparatus so as to restrict a movement of the said pickup in the outer peripheral in an outward radial direction, which is to a distance~~ not less than a predetermined radius.

28. (Currently Amended) A disk recording and reproducing apparatus, comprising:

- (a) a pickup for ~~carrying out~~ recording and reproducing with respect to a disk cartridges, wherein each said disk cartridge of which contains a disk recording medium having respective and different disk diameters cartridges contain disk recording media having different disk diameters relative to each other, and
- (b) restricting means for restricting movement ~~amount of the said pickup~~ in accordance with maximum pickup movement indicia provided by a disk cartridge size of the loaded into said disk recording and reproducing apparatus, cartridge: the disk cartridge having plural holes, which have different radial positions with respect to a disk center respectively, the plural holes being indicative of a relationship between said first diameter and a predetermined diameter of a second disk recording medium contained in a second disk cartridge that is different from said first diameter of said first disk recording medium contained in said first cartridge.

29. (Currently Amended) The disk recording and reproducing apparatus according to claim 28, further comprising:

determining means for determining the size said maximum pickup movement indicia of the said loaded cartridge.